

Sept 12, 2008

DEPT OF TRANSPORTATION
DOCKETS

U.S. Department of Transportation
The Chief Counsel
National Highway Traffic Safety Administration
1200 New Jersey Ave, SE
West Building
Washington, DC 20590

SEP 23 2008 1:27

**Subject: TITLE 49-TRANSPORTATION - CHAPTER V-NATIONAL HIGHWAY
TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF
TRANSPORTATION - PART 571 - Federal Motor Vehicle Safety Standards
Sec. 571.206 Standard No. 206; Door locks and door retention components.**

To whom it may concern:

TriMark is a designer and manufacturer of vehicular door latching systems for most types of on and off-road vehicles except Automotive. These include Recreational Vehicles including Motor Homes, Heavy Truck and other Specialty vehicles such as Ambulances, Fire trucks, delivery and utility trucks. This falls under the heading of trucks and multipurpose passenger vehicles in the current standard. We sell primarily to original equipment manufacturers and door manufacturers in the US and Europe.

TriMark Corporation is writing this letter to request an opinion regarding a new product that we are working on and have a question regarding section S4.1.3 Door Locks. The standard currently states "Each door shall be equipped with a locking mechanism with an operating means in the interior of the vehicle.

S4.1.3.1 Side Front Door Locks. When the locking mechanism is engaged, the outside door handle or other outside latch release control shall be inoperative.

S4.1.3.2 Side Rear Door Locks. In passenger cars and multipurpose passenger vehicles, when the locking mechanism is engaged both the outside and inside door handles or other latch release controls shall be inoperative.

The application in question is for an emergency vehicle (ambulance and fire truck) side and rear door system that consists of 2 single rotor latches each, with a primary and secondary position. The latches are located with one at the top of the door and the other at the bottom of the door. On the outside of the door is a pull type paddle/handle assembly (See Figure 1) that is connected to the latches via rods. When operating the door from the outside, the mechanism on the back of the handle rotates and pulls on the rods to release the latches (top and bottom). The outside handle has a key lock that locks the pull handle (See Figure 5). After closing the door the key can be rotated to put the door into the locked condition which renders the outside handle inoperable (free-float). The inside

handle is a pull type lever (See Figure 2) and is connected directly to the outside handle. The inside handle has a built-in locking lever that is activated via a slide action (See Figure 6).

When the door is in the unlocked condition, operating the handle from the inside of the door the linkage rod pulls on a mechanism located on the back of the outside handle which rotates and releases the latches (top and bottom). After closing the door the lock lever on the inside handle can be moved to the locked position. When in the locked condition, the inside handle is inoperable (free-float).

The following paragraph describes an added feature in the door system for which we are requesting an opinion; the latches each contain an independent release lever (See Figures 3 and 4) that protrudes through the door, to the interior of the unit. The reason for the independent release levers, is in the event of an emergency situation or extreme cold weather and a system binding occurs that does not allow the door to be opened via the inside or outside handle, the levers can be actuated individually on the top latch and on the bottom latch to release and open the door in both the locked or unlocked condition. This function does not unlock the door, but provides a direct emergency release for each latch allowing egress from the vehicle saving time and lives. Since the latches are not directly linked together, it takes a separate action to actuate each latch via their emergency release levers before the door can be opened. The latches are located more than 4 feet apart and cannot be reached simultaneously by a seat occupant.

We also know that the standard was revised on 2/6/07 and is effective September 1, 2009 and provides for optional early compliance after February 6, 2007. This new ruling provides a clarification of the definitions for "primary door latch" and "auxiliary door latch. Also the proposed standard states **S4.3 Door Locks.** Each door shall be equipped with at least one locking device which, when engaged, shall prevent operation of the exterior door handle or other exterior latch release control and which has an operating means and a lock release/engagement device located within the interior of the vehicle.

S4.3.1 Rear side doors. Each rear side door shall be equipped with at least one locking device which has a lock release/engagement mechanism located within the interior of the vehicle and readily accessible to the driver of the vehicle or an occupant seated adjacent to the door, and which, when engaged, prevents operation of the interior door handle or other interior latch release control and requires separate actions to unlock the door and operate the interior door handle or other interior latch release control.

S4.3.2 Back doors. Each back door equipped with an interior door handle or other interior latch release control, shall be equipped with at least one locking device that meets the requirements of S4.3.1.

The question that we are addressing to the NHTSA is, if we add the 2 emergency release levers to the door latches for Emergency Vehicles on side and rear doors, does that violate the requirements specified under PART 571 - Federal Motor Vehicle Safety Standards, Sec. 571.206 Standard No. 206 as revised 2/6/07; Door locks and door retention components as defined in parts S4.3.1 Rear Side Doors and S4.3.2 Back Doors for "at least one locking device which has a lock release/engagement mechanism located within the interior of the vehicle and readily accessible to the driver of the vehicle or an occupant seated adjacent to the door, and which, when engaged, prevents operation of the interior door handle or other interior latch release control and requires separate actions to unlock the door and operate the interior door handle or other interior latch release control"?

Our interpretation is that the locking requirements are met with our proposal regarding the first part of the standard "the locking device which has a lock release/engagement mechanism located within the interior of the vehicle and readily accessible to the driver of the vehicle or an occupant seated adjacent to the door, and which, when engaged, prevents operation of the interior door handle...". The second part of the requirement "or other interior latch release control and requires separate actions to unlock the door and operate the interior door handle or other interior latch release control" seems to cover our emergency release levers. However, the separate actions in our proposal are not "to unlock the door and operate the interior door handle or other interior latch release control", but separate actions to actuate each latch via their emergency release levers before the door can be opened. We feel that the standard is addressing a safety measure that does not allow for the doors to be inadvertently opened requiring 2 distinct operations, one requiring the unlocking of the door first and then one to operate the inside door handle. Our proposal requires 2 separate functions to actuate each door lock, plus the latches are located more than 4 feet apart and cannot be reached simultaneously by a seated occupant and feel that the safety of the occupants is not compromised. The other consideration is that these independent release levers are for emergency use only and are not intended for daily use. The main functions of the door hardware fully comply with the standard.

Thank you in advance for your time and consideration on these issues.

Sincerely,

Ric Marzolf
VP of R&D
TriMark Corporation
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New Hampton, IA.
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July 1, 2008

U.S. Department of Transportation
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Washington, DC 20590

WASHINGTON, D.C. 20590
2008 JUL 11 P 14:47
OFF. OF THE CHIEF COUNSEL

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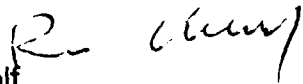
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Thank you in advance for your time and consideration on these issues.

Sincerely,

A handwritten signature in black ink, appearing to read "Ric Marzolf", written over the word "Sincerely,".

Ric Marzolf

VP of R&D

TriMark Corporation

500 Bailey Ave.

New Hampton, IA.

50659

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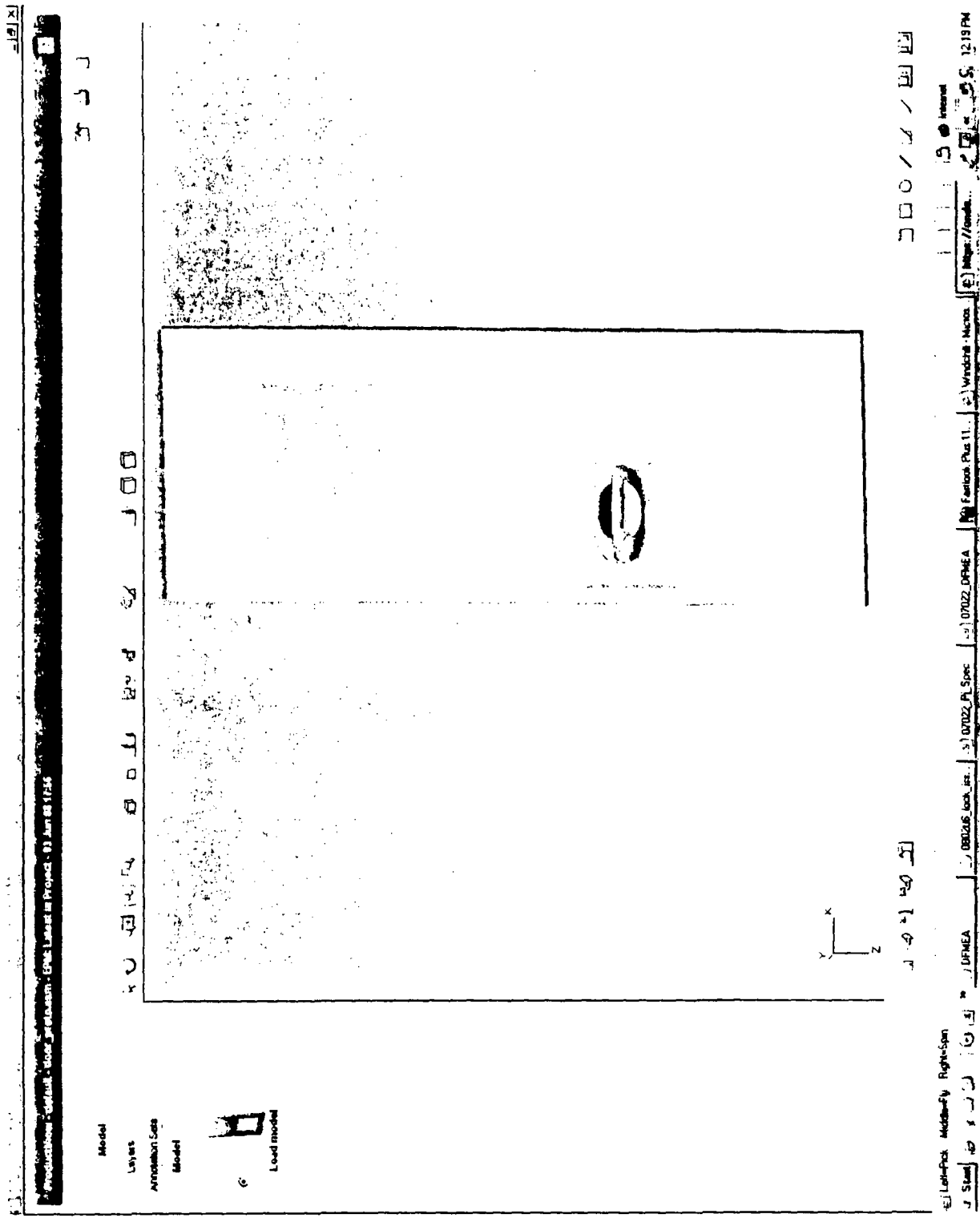


Figure 1 - View of outside door and actuation handle

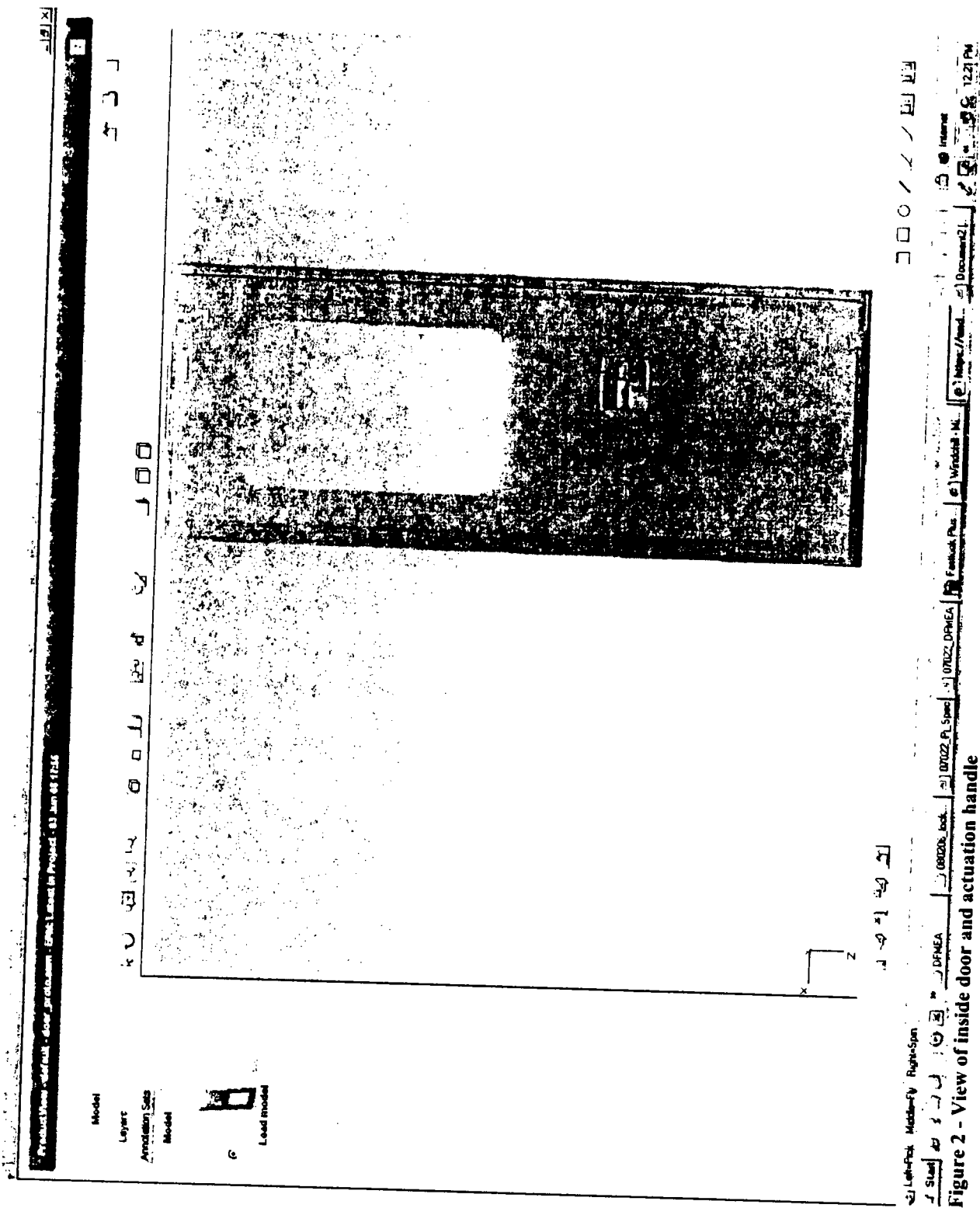


Figure 2 - View of inside door and actuation handle

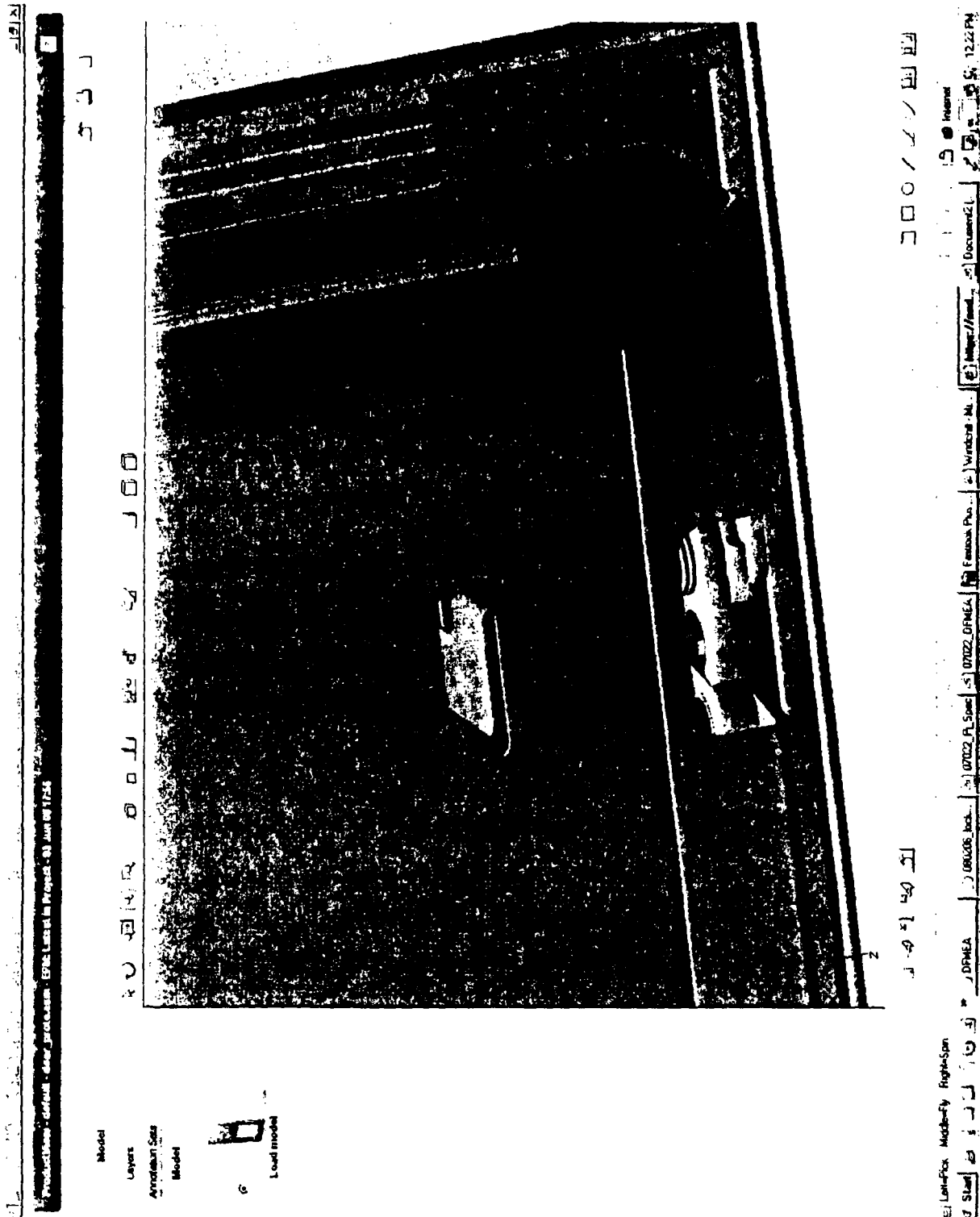


Figure 3 - View of Emergency release latch at the bottom of door / release lever

Model

Layers

Annotation Style

Model



Load model



Figure 4 - View of Emergency release latch at the bottom of the door/ showing independent trip levers

